| Item ID: | D3048-1 | | Accept | *N9000040100* | Setup | Start | *NS1* |
| Revision ID: | | | | | | Stop | *NS2* |
| Item Name: | Doubler | | | | | | |
| Start Date: | 4/24/2013 | Start Qty: 6.00 | *6* | Cust Item ID: | | | |
| Required Date: | 4/26/2013 | Req'd Qty: 6.00 | *6* | Customer: | | | |
| Reference: | | | | | | | |

Approvals:  Process Plan: ѠMF   Date: 13-4-24  Tooling:   Date:     Run  Start  *NR1*

QC:   Date:   SPC (Y/N):   Date:   Stop  *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D3048 | Rev A2 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 100 *100* Waterjet FLOW CNC Waterjet | FLOW WATER JET | 0.00 | | | | | | | |
| | Memo | 0.00 | | | | | | | |
| | 1-Cut as per Dwg D3048   Dwg Rev:_____ Prog Rev:_____ 2- Deburr if necessary | | | | | | | | |
| 110 *110* QC Quality Control | QC2- Inspect parts off machine FAI/FAIB | 0.00 | | | | | | | |
| | Memo | 0.00 | | | | | | | |
| 120 *120* QC Quality Control | QC8- Inspect parts - second check | 0.00 | | | | | | | |
| | Memo | 0.00 | | | | | | | |

*Handwritten notes:* N   A   see w/o # 99489

# WORK ORDER NON-CONFORMANCE / UPDATE

NCR:   Yes  /  No

| Work Order: _____ | **DISPOSITION** | | **AGAINST DEPARTMENT/PROCESS** | | | |
|---|---|---|---|---|---|---|
| Part No. _____ | Rework ☐ | Skid-tube ☐ | Crosstube ☐ | Water Jet ☐ | Engineering ☐ | |
| | Scrap ☐ | Machining ☐ | Small Fab ☐ | Prod. Eng. Coor. ☐ | Quality ☐ | |
| | Use-as-is ☐ | Thermoforming ☐ | Finishing ☐ | Rec/Store/Packaging ☐ | Other ☐ | |
| NCR No. _____ | Work Order Update ☐ | Large Fab ☐ | Composite ☐ | Supplier ☐ | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|
| Doc/Data ☐ | | | | | | | | | |
| Equip/Tooling ☐ | | | | | | | | | |
| Operator ☐ | | | | | | | | | |
| Material ☐ | | | | | | | | | |
| Setup ☐ | | | | | | | | | |
| Other ☐ | | | | | | | | | |
| Process ☐ | | | | | | | | | |
| Supplier ☐ | | | | | | | | | |
| Training ☐ | | | | | | | | | |
| Unapproved ☐ | | | | | | | | | |

## FAULT CATEGORY

| **Landing Gear** | **General** | | | |
|---|---|---|---|---|
| ☐ Bending | ☐ Bend | ☐ Grain | ☐ Ovalized | ☐ Pressure/Forced |
| ☐ Centre Not Concentric to O/S | ☐ BOM/Route | ☐ Hardware | ☐ Over/Under tolerance | ☐ Temperature/Cure |
| ☐ Cracks | ☐ Broken/Damaged | ☐ Inspection Incomplete | ☐ Part Incorrect | ☐ Weld |
| ☐ Crushed/Crimped | ☐ Burrs | ☐ Instructions Incomplete/Unclear | ☐ Part Lost/Missing | ☐ Wrong Stock Pulled |
| ☐ Cuffs | ☐ Contamination | ☐ Maintenance | ☐ Part Moved | |
| ☐ Heat Treat | ☐ Countersink | ☐ Mislabeled | ☐ Positioned Wrong | |
| ☐ Inspection Strip in Tube | ☐ Cut Too Short | ☐ Misread | ☐ Power Loss/Surge | ☐ Other |
| ☐ Ripples in Bend | ☐ Drill Holes | ☐ Offset | | |
| ☐ Torque Waves in Extrusion | ☐ Drawing | ☐ Out of Calibration | _____ | |
| ☐ Turning Sequence | ☐ Finish | ☐ Out of Sequence | _____ | |
| ☐ Wave/Twist in Tube | ☐ Folio | ☐ Outside Dimensions | _____ | |

| Item ID: | D3048-1 | | | Accept | \*N9000401OO\* | | Setup | Start | \*NS1\* |
|---|---|---|---|---|---|---|---|---|---|
| Revision ID: | | | | | | | | | |
| Item Name: | Doubler | | | | | | | Stop | \*NS2\* |

| Start Date: | 4/24/2013 | Start Qty: | 6.00 | \*6\* | | Cust Item ID: | | |
|---|---|---|---|---|---|---|---|---|
| Required Date: | 4/26/2013 | Req'd Qty: | 6.00 | \*6\* | | Customer: | | |
| Reference: | | | | | | | | |

| Approvals: | Process Plan: | | Date: | Tooling: | | Date: | Run | Start | \*NR1\* |
|---|---|---|---|---|---|---|---|---|---|
| | QC: | | Date: | SPC (Y/N): | | Date: | | Stop | \*NR2\* |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 130 **\*130\*** Brake NC Brake NC | NC BRAKE  Memo Form on CNC Brake per Dwg D3048 | 0.00  0.00 | | | | 6 | | | SP 13/04/30 |
| 140 **\*140\*** HandFinish Hand Finishing | Chemical Conversion Coat per QSI005 4.1  Memo | 0.00  0.00 | | | | 6 | | | 7ky /3-5-8 |
| 150 **\*150\*** QC Quality Control | QC5- Inspect part completeness to step on W/O  Memo | 0.00  0.00 | | | | 6 | | | DAS 27 BS8 |

# WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| Work Order: _____ | **DISPOSITION** | | **AGAINST DEPARTMENT/PROCESS** | | | | |
|---|---|---|---|---|---|---|---|
| | Rework ☐ | | Skid-tube ☐ | Crosstube ☐ | Water Jet ☐ | Engineering ☐ | |
| Part No. _____ | Scrap ☐ | | Machining ☐ | Small Fab ☐ | Prod. Eng. Coor. ☐ | Quality ☐ | |
| | Use-as-is ☐ | | Thermoforming ☐ | Finishing ☐ | Rec/Store/Packaging ☐ | Other ☐ | |
| NCR No. _____ | Work Order Update ☐ | | Large Fab ☐ | Composite ☐ | Supplier ☐ | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|
| Doc/Data ☐ | | | | | | | | | |
| Equip/Tooling ☐ | | | | | | | | | |
| Operator ☐ | | | | | | | | | |
| Material ☐ | | | | | | | | | |
| Setup ☐ | | | | | | | | | |
| Other ☐ | | | | | | | | | |
| Process ☐ | | | | | | | | | |
| Supplier ☐ | | | | | | | | | |
| Training ☐ | | | | | | | | | |
| Unapproved ☐ | | | | | | | | | |

## FAULT CATEGORY

| **Landing Gear** | **General** | | | |
|---|---|---|---|---|
| ☐ Bending | ☐ Bend | ☐ Grain | ☐ Ovalized | ☐ Pressure/Forced |
| ☐ Centre Not Concentric to O/S | ☐ BOM/Route | ☐ Hardware | ☐ Over/Under tolerance | ☐ Temperature/Cure |
| ☐ Cracks | ☐ Broken/Damaged | ☐ Inspection Incomplete | ☐ Part Incorrect | ☐ Weld |
| ☐ Crushed/Crimped | ☐ Burrs | ☐ Instructions Incomplete/Unclear | ☐ Part Lost/Missing | ☐ Wrong Stock Pulled |
| ☐ Cuffs | ☐ Contamination | ☐ Maintenance | ☐ Part Moved | |
| ☐ Heat Treat | ☐ Countersink | ☐ Mislabeled | ☐ Positioned Wrong | |
| ☐ Inspection Strip in Tube | ☐ Cut Too Short | ☐ Misread | ☐ Power Loss/Surge | ☐ Other |
| ☐ Ripples in Bend | ☐ Drill Holes | ☐ Offset | | |
| ☐ Torque Waves in Extrusion | ☐ Drawing | ☐ Out of Calibration | _____ | |
| ☐ Turning Sequence | ☐ Finish | ☐ Out of Sequence | _____ | |
| ☐ Wave/Twist in Tube | ☐ Folio | ☐ Outside Dimensions | _____ | |

| Item ID: | D3048-1 | | Accept | \*N9000040100\* | Setup | Start | \*NS1\* |

Item ID: D3048-1
Revision ID:
Item Name: Doubler

Stop \*NS2\*

Start Date: 4/24/2013   Start Qty: 6.00   \*6\*
Required Date: 4/26/2013   Req'd Qty: 6.00   \*6\*

Cust Item ID:
Customer:

Reference:

| Approvals: | Process Plan: | Date: | Tooling: | Date: | Run | Start | \*NR1\* |
| | QC: | Date: | SPC (Y/N): | Date: | | Stop | \*NR2\* |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 160 \*160\* Packaging Packaging | Identify as per dwg & Stock Location: CA Memo | 0.00 0.00 | | | | CX 13/10/2 ⑥ | | | |
| 170 \*170\* QC Quality Control | QC21- Final Inspection - Work Order Release Memo | 0.00 0.00 | | | | μ⁵/ μ/3-10-2 | | | |

CX 13/10/2

**NCR:** Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date:

| Work Order: _____ | DISPOSITION | AGAINST DEPARTMENT/PROCESS |
|---|---|---|

Work Order: _____

Part No. _____

NCR No. _____

**DISPOSITION**

Rework ☐
Scrap ☐
Use-as-is ☐
Work Order Update ☐

**AGAINST DEPARTMENT/PROCESS**

Skid-tube ☐   Crosstube ☐   Water Jet ☐   Engineering ☐
Machining ☐   Small Fab ☐   Prod. Eng. Coor. ☐   Quality ☐
Thermoforming ☐   Finishing ☐   Rec/Store/Packaging ☐   Other ☐
Large Fab ☐   Composite ☐   Supplier ☐

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|
| Doc/Data ☐ | | | | | | | | | |
| Equip/Tooling ☐ | | | | | | | | | |
| Operator ☐ | | | | | | | | | |
| Material ☐ | | | | | | | | | |
| Setup ☐ | | | | | | | | | |
| Other ☐ | | | | | | | | | |
| Process ☐ | | | | | | | | | |
| Supplier ☐ | | | | | | | | | |
| Training ☐ | | | | | | | | | |
| Unapproved ☐ | | | | | | | | | |

## FAULT CATEGORY

**Landing Gear**

☐ Bending
☐ Centre Not Concentric to O/S
☐ Cracks
☐ Crushed/Crimped
☐ Cuffs
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Ripples in Bend
☐ Torque Waves in Extrusion
☐ Turning Sequence
☐ Wave/Twist in Tube

**General**

☐ Bend
☐ BOM/Route
☐ Broken/Damaged
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drill Holes
☐ Drawing
☐ Finish
☐ Folio

☐ Grain
☐ Hardware
☐ Inspection Incomplete
☐ Instructions Incomplete/Unclear
☐ Maintenance
☐ Mislabeled
☐ Misread
☐ Offset
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions

☐ Ovalized
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

_____
_____
_____

*Wednesday, April 24, 2013  1:12:55 PM*

| | | | |
|---|---|---|---|
| **Work Order ID:** | **100618** | | |
| **Parent Item:** | **D3048-1** | **Start Date:** 4/24/2013 | **Required Date:** 4/26/2013 |
| **Parent Item Name:** | Doubler | **Start Qty:** 6.00 | **Required Qty:** 6.00 |

**Comments:** IPP:  A   02.11.19  New issue   KJ/RF
IPP Rev:B  Now on Waterjet  06-10-15  JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M2024T3S.063 2024-T3 .063 sheet | | Purchased | No | | | 100 | sf | 221.8800 | 3.4583 | 21.841895 | | | |

| Location | Loc Qty | Loc Code |
|---|---|---|
| MAT022 | 221.88 | |
| 119916 | 0.2 | |
| 121197 | 21.34 | |
| 123096 | 11.4 | |
| 123654 | 11.64 | |
| 123701 | 81.3 | |
| 125341 | 96 | |

*N A see w/o 99489*

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| Work Order: _____ | DISPOSITION | AGAINST DEPARTMENT/PROCESS | | |
|---|---|---|---|---|
| Part No. _____ | Rework ☐ | Skid-tube ☐  Crosstube ☐ | Water Jet ☐ | Engineering ☐ |
| | Scrap ☐ | Machining ☐  Small Fab ☐ | Prod. Eng. Coor. ☐ | Quality ☐ |
| | Use-as-is ☐ | Thermoforming ☐  Finishing ☐ | Rec/Store/Packaging ☐ | Other ☐ |
| NCR No. _____ | Work Order Update ☐ | Large Fab ☐  Composite ☐ | Supplier ☐ | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|
| Doc/Data ☐ | | | | | | | | | |
| Equip/Tooling ☐ | | | | | | | | | |
| Operator ☐ | | | | | | | | | |
| Material ☐ | | | | | | | | | |
| Setup ☐ | | | | | | | | | |
| Other ☐ | | | | | | | | | |
| Process ☐ | | | | | | | | | |
| Supplier ☐ | | | | | | | | | |
| Training ☐ | | | | | | | | | |
| Unapproved ☐ | | | | | | | | | |

## FAULT CATEGORY

| Landing Gear | General | | | |
|---|---|---|---|---|
| ☐ Bending | ☐ Bend | ☐ Grain | ☐ Ovalized | ☐ Pressure/Forced |
| ☐ Centre Not Concentric to O/S | ☐ BOM/Route | ☐ Hardware | ☐ Over/Under tolerance | ☐ Temperature/Cure |
| ☐ Cracks | ☐ Broken/Damaged | ☐ Inspection Incomplete | ☐ Part Incorrect | ☐ Weld |
| ☐ Crushed/Crimped | ☐ Burrs | ☐ Instructions Incomplete/Unclear | ☐ Part Lost/Missing | ☐ Wrong Stock Pulled |
| ☐ Cuffs | ☐ Contamination | ☐ Maintenance | ☐ Part Moved | |
| ☐ Heat Treat | ☐ Countersink | ☐ Mislabeled | ☐ Positioned Wrong | |
| ☐ Inspection Strip in Tube | ☐ Cut Too Short | ☐ Misread | ☐ Power Loss/Surge | ☐ Other |
| ☐ Ripples in Bend | ☐ Drill Holes | ☐ Offset | | |
| ☐ Torque Waves in Extrusion | ☐ Drawing | ☐ Out of Calibration | _____ | |
| ☐ Turning Sequence | ☐ Finish | ☐ Out of Sequence | _____ | |
| ☐ Wave/Twist in Tube | ☐ Folio | ☐ Outside Dimensions | _____ | |